NASA/NSF Site Survey

Seattle, WA 9/06/05 - 9/09/05

Participants on the site survey included:

Kent Shiffer (NASA), Pavel Romashkin, Jeff Stith, Lowell Genzlinger, Allen Schanot (NCAR)

NSF C-130 aircraft requirements:

Sufficient ramp space for aircraft to be able to taxi, unassisted, into and out of parking area. Available government contract fuel from local airfield FBO. Storage space for 2 sea-containers locally adjacent to the aircraft for spare parts and use as a storage facility.

Further C-130 requirements will be assessed by the NCAR group who participated in the survey.

<u>Instrument PI preliminary requirements:</u>

Hotel accommodations for 35-40 experimenters and support personnel.

Limited laboratory space adjacent to the aircraft of approximately 20'x20' would allow the capabilities to repair and calibrate instruments. Wet Lab use (water and sink) for at least 4 experimenters during the duration of the experiment is requested for NOxyO3, HIGEAR, PILS-IC/TOC, Peroxide CIMS. Hazardous materials storage with a small amount of refuse of materials is also requested.

Operations Center requirements:

An operations facility for experimenter daily use as well as weather forecasting and flight planning with high speed internet capabilities is requested. This space would also be used intermittently as a meeting space for approximately 35 people. Space would be best suited to be of an area space of at least 500 square feet.

Paine Field

Paine field located 39 miles north of SeaTac airport off of Route 5.

Location of the parking area for the C-130 would be on the South Ramp north of Building 207. Ample parking for the aircraft is available. Car parking would have to be limited to the South side of building 207 with the exception of maintenance having access directly to the ramp via a security gate with cipher lock. Office spaces may be available in hangar 201 from Tim Adamson (current lease holder) of Nash Creek Aviation.





Photo of overview of Paine Field with NSF C-130 parking area inset.



Panoramic View of ramp from Hangar 201. NSF C-130 would park in front of the B-52.





Hangar 201 possible office space.

Hangar 207 ramp parking



Ramp showing parking area in front of B-52.

Hotel accommodations and possible Operations Center facilities:

The best option for the hotel and the Operations center appears to be in the Hilton Garden currently being built and due to be in service October 1, 2005. This hotel is located on the north end of the field and is associated with the Future of Flight museum also being built and due to come online concurrent with the hotel. Both the hotel and the museum have ample accommodations for meeting space and are equipped with high speed internet access in both wired and wireless forms.

There are multiple hotels within 5 miles of the airport which can accommodate long term stays and offer refrigerators and microwaves at a minimum.

Hilton Garden Inn Midrange price- refrigerator/microwave in room – easy access

Offers conference room and free high speed internet access

8401 Paine Field Blvd., Mukilteo, WA 98275 425.423.9000

Marriott, Town Place Suites Midrange price – kitchenette (nice environment)

High speed internet in rooms—no conference room or meeting space.

8521 Mukilteo Speedway, Mukilteo, WA 98275 425.551.5900

Extended Stay America Low Price – Kitchenette- (minimalist environment)

High speed internet in rooms—no conference room or meeting space.

3917 Harbour Pt Blvd. SW, Mukilteo 425.493.1561

Hampton Inn and Suites Midrange price – close to shopping--15 minutes from field

Offers conference room and free high speed internet access - morning breakfast 19324 Alderwood Mall Pkwy, Lynnwood, WA 98036 425.771.1888

Best Western, Cambridge Inn Midrange price, sister property with Hampton Inn

High speed internet in rooms—no conference room or meeting space.

Future of Flight Aviation Center http://www.painefield.com/fof/fof.html

Offers tours of the Boeing facility and can accommodate the Operations Center with meeting space of 25'x20', as well as, larger meeting spaces if needed. Limited access time from 0700-2300 daily. High speed internet with wired and wireless available.





Future Flight Exterior

Future Flight Large Meeting Space

Everett Community College of Aviation

Located on Pain Field - Possible classroom 20'x30'. May have to wire the room for Wide Area Network.







College Classroom

Issues with Paine Field:

Ramp space in front of hangars 201, 207 could be leased out prior to our arrival in April, 2006. C-130 parking area alternative is relatively distant from any electrical power, water or covered office space. Automobile parking and access would be extremely limited and radio access via the tower ground control to cross the runway is required.

Boeing Field King County Airport

Spoke with the Boeing Field operations manager and Karol Elwood and found the field does not available space to park a C-130. She suggested speaking to the largest FBO's located on the field Galvin and Clay Lacy. Galvin also did not have ramp space to park the aircraft but Clay Lacy was able to find room is willing to accommodate the needs.

Boeing is very convenient when arriving in Seattle's SeaTac airport. Located 7 miles north of SeaTac airport and 6 miles south of downtown Seattle. Take the Marginal Way exit, west off of route 5.

FBO-Clay Lacy

Met with Rob Campbell operations manager at Clay Lacy FBO and he was able to show us a location to park and operate the C-130 approximately 150 yards from the Clay Lacy terminal. The aircraft could be taxied into and out of the parking area without use of a tow tractor. Currently there is access to 2 small office spaces that have 115vac power but no internet capability. Each of the office space is similar in size approximately 12'x20' each with a single bathroom. Both offices were upstairs and not on the ground level but one is directly adjacent to the aircraft with a window overlooking the ramp parking area.

Clay Lacy is the government contract fuel provider for the entire Boeing Field.

The Clay Lacy terminal offers wireless access and flight planning capability.





Clay Lacy Office Space

Clay Lacy FBO General Aviation Hangar

CLAY LAG

<u>Issues with Clay Lacy Aviation FBO at Boeing Field:</u>

The terminal is fairly busy with private and corporate aircraft operations. Instrument groups would access aircraft via the general aviation ramp which is very busy. Possible safety issue. Could be mitigated with escorts and training.

Office spaces could be rented out prior to our arrival.

Possible relocation of aircraft (short term) should VIP's arrive and depart from FBO.

High volume automobile traffic to and from the airport via route 5, although the alternative access from the local hotels is available and relatively easy.

There is a significant lack of parking spaces for cars in and around the FBO. This seems fairly typical for the airport in general. Bus service or hotel shuttle (which is available) would be the best alternative to alleviate parking issues.



Hotel accommodations and possible Operations Center facilities:

The best alternative for accommodations appears to be the Best Western Rivers Edge in Tukwila, 5 miles from Boeing Field. The Best Western will provide an internet capable dedicated meeting space for the entire mission time frame. This space would be free of cost providing a majority of participants staying at the hotel. All major hotels can provide shuttle service to and from SeaTac, Boeing Field, and the local shopping mall upon request.

There are many hotels within a 5 mile radius from the airport that can accommodate large numbers of long term guests. Most of these hotels have meeting spaces available and that may be able to be contracted for exclusive use during the entire mission duration as well as larger spaces that can be used on an intermittent basis. All have internet capabilities. Per Diem rates for Boeing Field, King County, are approximately 25 % higher than the rates at Paine Field, Snohomish County.

Hotels: **Courtyard Marriot** 16038 West Valley Hwy, Tukwila, WA 98188

Embassy Suites - SeaTac 15920 W Valley Hwy Tukwila WA Us 98188

Best Western Rivers Edge 15901 W Valley Highway Tukwila, Washington